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| 10/681,942      | 10/10/2003  | Peter H.L. Hu        | H346 0011           | 7927             |

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EXAMINER

LAZORCIK, JASON L

ART UNIT PAPER NUMBER

1731

DATE MAILED: 06/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/681,942

Applicant(s)

HU, PETER H.L.

Examiner

Jason L. Lazorcik

Art Unit

1731

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 October 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 01/12/2004.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Drawings***

The drawings are objected to because the reference character (32) in figure 2 has been defined in ¶ [0022] as a cellulose acetate filter and as such runs counter to the claimed filter structure as set forth in the specification. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: Specifically, the reference character (30), defined in ¶ [0021] as an

Art Unit: 1731

activated charcoal filter, has not been depicted in Figure 2. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: Specifically, the reference character (34) depicted in Figure 2 has not been adequately defined in the specification. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective

Art Unit: 1731

action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Reference is made in the immediate claim to "shredded tobacco" while the parent claim sets forth to two distinct sections [(a) and (d)] of the claimed cigarette which contain shredded tobacco. Claim 2 is therefore rendered indefinite as currently set forth since it is unclear to which section of said cigarette the length limitation is intended to apply.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

Art Unit: 1731

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

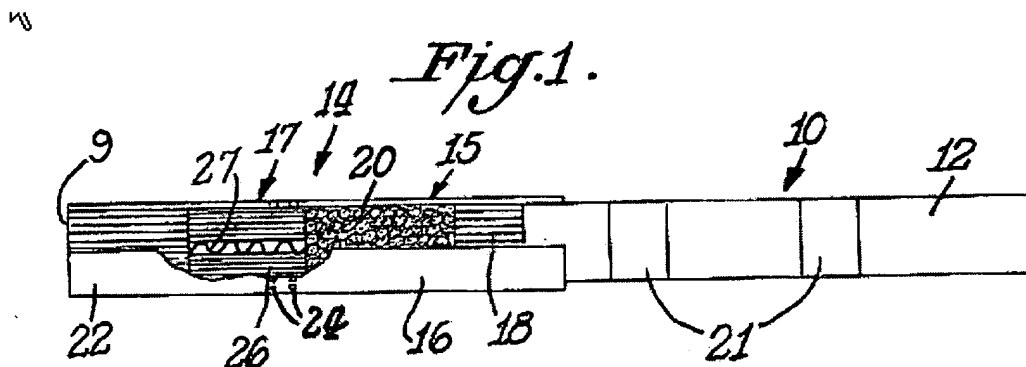
Claims 1 through 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jupe (US 2002/0166563 A1) in light of Berger (4,291,711) and Schnyder (GB 1,038,511).

With respect to Claims 1, Jupe teaches (see Fig. 1 excerpt below) a cigarette comprising:

- (a/b) A tobacco rod **(12)** ( $\P$  [0031]) which is held equivalent to the claimed "cigarette paper cylinder" and "a shredded tobacco section".
- (c) A tobacco end component **(18)** ( $\P$  [0031]) located adjacent to the tobacco rod which is held equivalent to the claimed "first smoke filter section
- (d) A compartment adjacent to the tobacco end compartment with boundaries defined by the combination of a central filter component **(17)** of components **(26)** and **(27)** and carbon material **(20)**. This combined volume is held equivalent to the "second smoke filter section" adjacent the first filter section in the interior of the cylinder
- (e) A mouth end component **(22)** ( $\P$  [0032]) in the form of a cellulose acetate plug which is held equivalent to the claimed "third smoke filter section comprising a porous filter section adjacent the second filter section in the interior of the cylinder".

Art Unit: 1731

- (f) A bed of high surface area activated carbon material (20) in "the second smoke filter section" as described in (d) above which is held equivalent to the claimed activated charcoal in either the second or third filter section.

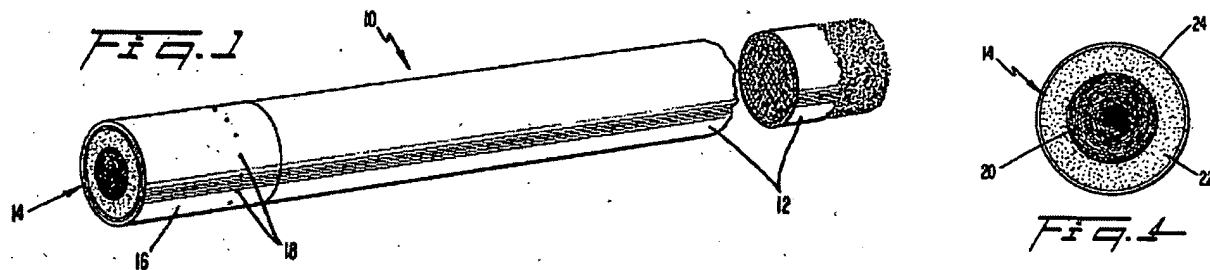


Jupe fails to teach that the second smoke filter section as set forth above should comprise cork particles and tobacco shred. However, the immediate reference does indicate ([0036]) that the central filter component (17) comprises a plug of fibrous filter material (26) together with one or more flavor-bearing yarns (27). Further, Mainstream smoke is drawn through the central filter component (17) and along the yarn (27) in order to release flavoring into the stream of mainstream smoke. In particular, the central filter component (17) and its flavor yarn (27) are located down stream from the activated carbon bed in order to reintroduce flavor components into filtered mainstream smoke.

Berger teaches (Column 2, Lines 23-30) of the construction of a tobacco smoke filter which includes tobacco as a filtering material for flavor enrichment of the filtered smoke. Specifically, the structure (see Fig.1 and Fig.4 excerpt below) is similar to the central filter component (17) above in that an axially elongated filtering material is

Art Unit: 1731

disposed concentrically with respect to the flavor bearing element which here comprises a reconstituted tobacco member (Column 2, Lines 59-61).



Here the intermediate member (22) of the filter element (14) depicted in the immediate reference Fig. 4 is functionally equivalent to the fibrous filter material (26) in the Jupe Fig 1 above. This intermediate member (Column 5, Lines 50-55) is formed of fibrous filtering material having a greater resistance to draw than that of the reconstituted tobacco core member (20). Further, Berger indicates that "the intermediate member provides a self-sustaining dimensionally stable smoke-permeable body defining tortuous paths for passage of smoke there through" (Column 5, Lines 59-61). As such smoke passing through the filter element will be directed primarily through and thus flavored by the reconstituted tobacco member (20). For the above reasons, the reconstituted tobacco member (20) provides a functional equivalent to the flavored yarn (27) in the Jupe Fig 1. It would therefore be obvious to one of ordinary skill in the art at the time of the invention to substitute a "reconstituted tobacco member" (27') (or "tobacco shred" in Claim 1(d)) as taught by Berger for the flavored yarn (27) set forth by Jupe in order to enrich the tobacco flavor of mainstream smoke drawn through the "second smoke filter section".

Schnyder teaches a tobacco filter comprising a first portion which is permeable by the smoke, and a second section which is impermeable (Pg.1, Lines 13-15). As depicted in the immediate reference Figure 4, one of the preferred structures incorporates a concentric annular design as similar to both the Berger and Jupe designs described above with an impervious annular portion (11) and an axial cylindrical porous portion (12). In the present structure, the impervious portion (11) serves to direct mainstream smoke flow through the central porous portion (12) and is therefore a functional equivalent to both the intermediate member (22) in Berger and the plug of fibrous filter material (26) in Jupe. Further, Schnyder discloses that "among the materials constituting the impervious component, are...cork granules...and other very short natural or artificial fibrous elements" (Pg 4, Lines 33-37). It would therefore be obvious to one of ordinary skill in the art to replace the plug of fibrous filter material (26) in Jupe with functionally equivalent cork particles (26') as taught by Schnyder in order to channel the mainstream smoke selectively over the flavor bearing element (27) thus enriching the flavor of said mainstream smoke.

Claims 2 through 9 are rendered obvious in light of the argument set forth in the above rejection of Claim 1 and the additional details as follows:

Specifically regarding Claim 2, Berger (§ [0043]) states that the length of tobacco rod is preferably 49 mm and the length of the filter (14) is preferably 34mm which is understood to provide a cigarette paper cylinder of  $[(49/(34+49))=\sim .60]$  ~60% of the total cylinder length. The stated dimensions read directly on the immediate claim as

providing a shredded tobacco "section" described in part (b) from Claim 1 from 1/3 to 2/3 the length of the cigarette paper cylinder.

Similarly in Claim 3, since the tobacco rod comprises ~60% of the total cylinder length as set forth above the filter comprises ~40%. These dimensions read on the immediate claim where the lengths of the three filter sections in sum total are between 1/3 and 2/3 of the length of the cigarette paper cylinder.

Regarding Claim 4, the immediate reference indicates (§ [0031], [0032]) that both the end component **(18)** and the mouth end component **(22)** are to be composed of cellulose acetate which is read as both the first and third filter sections being cellulose acetate.

Regarding Claim 5, the cigarette defined by Jupe in light of Berger and Schnyder (referring to Fig. 1 Jupe) provides a structure wherein the tobacco shred **(27')** and cork particles **(26')** are separate from one another in two subsections

With respect to Claim 6 and again referring to Fig. 1. Jupe, the activated charcoal **(20)** and third filter section **(22)** are separate from one another in two subsections.

Regarding Claim 7 and with particular reference to the Claim 1 rejection above, the cigarette defined by Jupe in light of Berger and Schnyder also defines a cigarette filter comprising:

- (1a.) A first smoke filter section set forth in section (c) above
- (1b.) A second smoke filter comprised of cork particles and tobacco shred as set forth in section (d) above in light of the Berger and Schnyder references

Art Unit: 1731

(1c.) A third smoke filter as set forth in section (e) above

(1d.) Activated charcoal incorporated in the second smoke filter section or in the third smoke filter section as set forth in section (f) above

Claim 8 is rejected on the same grounds as Claim 5 above.

Claim 9 is rejected in light of Claim 8 and the argument set forth in the rejection of Claim 6 above.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason L. Lazorcik whose telephone number is (571) 272-2217. The examiner can normally be reached on Monday through Friday 8:30 am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on (571) 272-1189. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Art Unit: 1731

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JLL

  
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